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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,285	02/01/2001	Kimberlee A. Kemble	6169-149	8255

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EXAMINER

NARAYANASWAMY, SINDYA

ART UNIT	PAPER NUMBER
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2174

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/775,285

Applicant(s)

KEMBLE ET AL.

Examiner

Sindya Narayanaswamy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 - 20 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 6 and 9-18 are rejected under 35 USC 102(b) as being anticipated by Gould et al ("Gould"), US-6,088,671.

3. As per claim 1, Gould teaches a method for presenting database query results through an audio user interface (AUI), comprising: initiating a database query operation (*command*), the operation retrieving a plurality of database query result items from at least one database (*retrieve matches from templates*); and, presenting each query result item through the AUI as each query result item is found in at least one database, the presenting step occurring concurrently with the database query operation (col. 4, lines 59-col. 5, line 2, Fig. 8a; col. 6, lines 47-52).

4. As per claim 2, Gould teaches the method further comprising: detecting a speech response through the AUI during the presentation, the speech response selecting the query result item presented through the AUI; and, responsive to the detection, terminating the database query operation (*CPU is finished and text is removed*) (col. 6, lines 35-46).

5. As per claim 3, Gould teaches the method further comprising: detecting a command during the presentation to terminate the database query operation; and, responsive to the detection, terminating the database query operation (*CPU terminates upon speech (command) being recognized*) (col. 6, lines 24-26).

6. As per claim 4, Gould teaches the method wherein the command is a speech command (col. 6, lines 18-24).

7. As per claim 5, Gould teaches the method further comprising: inserting each result item in a data structure as each query result item is found (col. 7, lines 43-52).

8. As per claim 6, Gould teaches the method wherein the presenting step comprises: presenting each query result item contained in the data structure independently but concurrently with a database query operation (*partial listing shows how recognition is proceeding*) (col. 7, lines 43-52).

9. As per claim 9, Gould teaches a method for presenting database query results through an audio user interface (AUI) comprising:

a database manager for managing a database query operation on at least one database, the database query operation producing database query result items; and,

a dialog manager for managing the presentation of said database query result items through the AUI concurrently with said database query operation (col. 2, lines 50-64).

10. As per claim 10, Gould teaches a system wherein the AUI comprises:
a text-to-speech processor for converting the database query result items into audible speech; and,
a speech recognition engine for converting speech input into text recognizable by the dialog manager (Fig. 2, 38; col. 4, lines 12-15).
11. As per claim 11, Gould teaches the system wherein the AUI further comprises: a barge-in facility (*when command is determined, partial listing is terminated and command is executed*) (col. 6, lines 30-36).
12. As per claim 12, Gould teaches the system wherein a queue for storing database query result items from the database query operation; and, a queue manager for managing the insertion and removal of database query items to and from the queue (col. 6, lines 38-41).
13. As per claims 13-18 they are the machine-readable storage claims of claims 1-6, and are thus rejected under the same rationale.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims 8 and 20 are rejected under 35 USC 103(a) over Gould et al ("Gould"), US-6,088,671 in view of Bruce et al, US-6,539,080.

16. As per claims 8 and 20, Gould discloses claims 1 and 13 but does not explicitly teach the method or machine-readable storage wherein the AUI is a telephony interface. However, Bruce et al teach the method and machine-readable storage wherein the AUI is a telephony interface (*telephone call is placed*) (Abstract, lines 3-19) (*Merriam-Webster's dictionary defines a telephony interface as the use or operation of an apparatus for transmission of sounds between widely removed points with or without connecting wires*). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Gould with Bruce et al's step of incorporating a telephony interface into an AUI speech and voice recognition system in order to create a system where information can be transmitted from two geographically removed points.

17. Claims 7 and 19 are rejected under 35 USC 103(a) over Gould et al ("Gould"), US-6,088,671.

18. As per claims 7 and 19, Gould teaches the invention substantially as claimed including the method and the machine-readable storage wherein the data structure is selected from the group consisting of a list (col. 7, lines 43-52). Gould does not teach the method wherein the data

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structure is a stack, or a database. However Official Notice is taken that databases and stacks are very well known in the art, therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include the possibility of using a stack or database data structure in order to provide a variety of storage possibilities based on need.

Response To Argument

19. In the remarks, applicant has argued in substance that:

(1) Gould does not teach the presenting of a database query results concurrently with the query operation.

(2) Gould fails to disclose terminating a database query operation responsive to a speech response.

(3) The Applicant's invention uses an AUI and not a GUI (as Gould does).

(4) Gould fails to teach that hits from a database search are placed within a list as each hit is found.

(5) Gould uses an n-best list for purposes of speech recognition. The Applicant's invention does not engage in ranking of results.

(6) Gould does not teach a dialog manger that manages the audible presentation of database query result items concurrently with the database operation.

(7) Gould teaches nothing about using a text-to-speech processor for converting database results into speech.

(8) Gould does not teach the barge-in facility taught in the Applicant's invention, which can terminate the execution of a database query responsive to a user selection of an audibly presented query result.

(9) Gould teaches initially displaying recognized speech in a GUI in col. 6, lines 38-41, which bears no relation to the queue and the queue manager disclosed by the Applicants.

(10) Bruce fails to teach or suggest that database query results can be presented through an AUI as the results are determined concurrently with the execution of the database operation.

20. Examiner respectfully disagrees with Applicant's arguments and resubmits that

As to point (1), Gould does teach the method of presenting database query results (col. 4, line 49-67). When the system receives a user's speech (*query*) the CPU determines whether it is recognizable, and then proceeds to display the results (col. 6, lines 18-34).

As to point (2), Gould discloses terminating a database query operation responsive to a speech response. When a match is made with a user's speech, the CPU is finished, and termination occurs (col. 6, lines 24-34).

As to point (3), Gould teaches an Audio User Interface, where the user inputs a query using auditory commands (col. 1, lines 9-32, col. 4, lines 12-15). The claim language does not specify that the results of the query must be presented in an auditory manner.

As to point (4), Gould teaches that hits from a database search are placed within a list as each hit is found (col. 6, lines 18-33). A partial list is displayed and updated as the CPU is recognizing the speech.

As to point (5), Applicant has claimed that Gould uses an n-best list for purposes of speech recognition. Applicant has failed to point out any figures or column and lines that describe this in detail. Moreover, the ranking of results retrieved from the database has no bearing on the fact that both Gould and the claimed invention retrieve results from a database.

As to point (6), Gould teaches a dialog manger that manages the audible presentation of database query result items concurrently with the database operation (col. 3, lines 36-49). Since the system must recognize queries/input as they are being processed, there is a manager (*monitor software*) that manages what has been entered but not yet processed.

As to point (7), Gould very explicitly teaches a text-to-speech processor (col. 4, lines 12-15). Gould states that text can be entered into a speech recognizer window, after which, the "document" (ie, text) is transferred to the application.

As to point (8), Gould teaches the barge-in facility taught in the Applicant's invention, which can terminate the execution of a database query responsive to a user selection of an audibly presented query result (col. 6, lines 24-34). When an appropriate match is made, the "barge-in" facility prevents the CPU from any further processing.

As to point 9, Gould teaches the queue and the queue manager disclosed by the Applicants (col. 6, lines 38-41). Gould teaches that results are displayed and removed from the list of results (queue) presented to the user, thus a "queue manager" is in operation within the system allowing for this queue/list manipulation.

As to point 10, Bruce teaches that database query results can be presented through an AUI as the results are determined concurrently with the execution of the database operation (col. 2, lines 54-63). The inputted information is sent to a database, where it is processed. The

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communication, Bruce further teaches, can be done through an AUI (*through a voice interactive system*).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sindya Narayanaswamy whose telephone number is (703) 305-8473. The examiner can normally be reached on 8 am to 5 pm, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (703) 308-0640. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sindya Narayanaswamy
February 17, 2004

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